Claims

1 A mobile digital device having an operating input unit, the input unit comprising:

a ten-key pad being comprised of a key mat on which ten-key buttons with respective projections on the under surfaces thereof are laid out and a board on which respective contacts corresponding to the projections are laid out; and

an electrostatic capacity sensing pad having through holes to be inserted the projections corresponding thereto and being provided with between the key mat and the board.

2 A mobile digital device according to claim 1, wherein the ten-key buttons are printed on the key mat.

3 A mobile digital device comprising:

a ten-key pad being comprised of a key mat on which ten-key buttons with respective projections on the under surfaces thereof are laid out and a key circuit board on which respective contacts corresponding to the projections are laid out;

an electrostatic capacity sensing pad for sensing an electrostatic capacity change to detect a touched region and having through holes to be inserted the projections corresponding thereto and being provided with between the key mat and the key circuit board;

a memory for keeping predetermined item names as table elements corresponded to respective small regions provided within a pad region of the electrostatic capacity sensing pad;

an item name selector for selecting an item name corresponded to a small region in which a representative point of the touched region is situated; and

a data value determiner for determining a data value of the selected item name according to the size of the touched region.

4 A mobile digital device according to claim 3, further comprising:

a memory controller for storing the touched region detected by the electrostatic capacity sensing pad in a memory;

a locus generator for generating a locus from a set of

representative points of the touched region;

and wherein the item names kept in the memory are background, line thickness, and line color.

5 A mobile digital device according to claim 3, further comprising:

a display panel; and

a display controller for generating displaying data from the selected item name and the determined data value to display a concrete symbol corresponded to the determined value in an area within the display panel assigned according to the selected item name.

6 A mobile digital device according to claim 5, wherein each of the item names kept in the memory has subdivision item names thereof and the data value determiner determines a data value by tracking the subdivision item names.

7 A mobile digital device comprising:

a ten-key pad being comprised of a key mat on which ten-key buttons with respective projections on the under surfaces thereof are laid out and a key circuit board on which respective contacts corresponding to the projections are laid out;

an electrostatic capacity sensing pad for sensing an electrostatic capacity change to detect a touched region and having through holes to be inserted the projections corresponding thereto and being provided with between the key mat and the key circuit board;

a memory controller for storing the touched region detected by the electrostatic capacity sensing pad in a memory;

a locus generator for generating a locus from a set of representative points of each of the touched regions stored in the memory; and

a breakpoint detector for detecting a breakpoint of the locus according to a feature of the touched region.

8 A mobile digital device according to claim 7, wherein the breakpoint detector detects the breakpoint according to a size of the touched region.

9 A mobile digital device according to claim 8, further comprising:

a character recognizer for recognizing a character from the locus generated by the locus generator and the breakpoint detected by the breakpoint detector.

10 A mobile digital device according to claim 7, further comprising:

a direction determiner for determining a touch direction according to a figure of the touched region detected by the electrostatic capacity sensing pad;

and wherein the breakpoint detector detects the breakpoint according to the touch direction.

11 A mobile digital device according to claim 10, further comprising:

a character recognizer for recognizing a character from the locus generated by the locus generator and the breakpoint detected by the breakpoint detector.

12 A mobile digital device according to claim 7, wherein the breakpoint detector detects the breakpoint according to a number of the touched regions detected by the electrostatic capacity sensing pad simultaneously.

13 A mobile digital device according to claim 12, further comprising:

a character recognizer for recognizing a character from the locus generated by the locus generator and the breakpoint detected by the breakpoint detector.

14 A mobile digital device comprising:

a ten-key pad being comprised of a key mat on which ten-key buttons with respective projections on the under surfaces thereof are laid out and a key circuit board on which respective contacts corresponding to the projections are laid out;

an electrostatic capacity sensing pad for sensing an electrostatic capacity change to detect a touched region and having

through holes to be inserted the projections corresponding thereto and being provided with a portion having the through holes between the key mat and the key circuit board and with the other portion on a part of a chassis of the mobile digital device;

a memory controller for storing the touched region detected by the electrostatic capacity sensing pad in a memory;

a locus generator for generating a locus from a set of representative points of each of the touched regions stored in the memory;

a direction determiner for determining a touch direction according to a figure of the touched region detected by the electrostatic capacity sensing pad; and

a breakpoint detector for detecting a breakpoint of the locus according to the touch direction determined by the direction determiner.

15 A mobile digital device according to claim 14, wherein the touch direction determined by the direction determiner is a direction held by the user.

16 A mobile digital device comprising:

a ten-key pad being comprised of a key mat on which ten-key buttons with respective projections on the under surfaces thereof are laid out and a key circuit board on which respective contacts corresponding to the projections are laid out;

an electrostatic capacity sensing pad for sensing an electrostatic capacity change to detect a touched region and having through holes to be inserted the projections corresponding thereto and being provided with between the key mat and the key circuit board; and

a controller for selecting a function corresponded to a feature of the touched region detected by the electrostatic capacity sensing pad and executing the selected function.

17 A mobile digital device according to claim 16, wherein the controller selects a function corresponded to a size of the touched region detected by the electrostatic capacity sensing pad and executing the selected function.

18 A mobile digital device according to claim 16, further comprising:

a direction determiner for determining a touch direction according to a figure of the touched region detected by the electrostatic capacity sensing pad;

and wherein the controller selects a function corresponded to the touch direction determined by the direction determiner and executing the selected function.

19 A mobile digital device according to claim 16, wherein the controller selects a function according to a number of the touched regions detected by the electrostatic capacity sensing pad simultaneously and executing the selected function.

20 A mobile digital device comprising:

a ten-key pad being comprised of a key mat on which ten-key buttons with respective projections on the under surfaces thereof are laid out and a key circuit board on which respective contacts corresponding to the projections are laid out;

an electrostatic capacity sensing pad for sensing an electrostatic capacity change to detect a touched region and having through holes to be inserted the projections corresponding thereto and being provided with between the key mat and the key circuit board;

a memory for keeping predetermined functions corresponded to respective small regions provided within a pad region of the electrostatic capacity sensing pad;

a function selector for selecting a function corresponded to a small region in which a representative point of the touched region is situated; and

a function controller for controlling the selected function according to a feature of the touched region detected by the electrostatic capacity sensing pad.

21 A mobile digital device according to claim 20, wherein the function controller controls the selected function according to a size of the touched region detected by the electrostatic capacity sensing pad.

22 A mobile digital device according to claim 20, further comprising:

a direction determiner for determining a touch direction according to a figure of the touched region detected by the electrostatic capacity sensing pad;

and wherein the function controller controls the selected function according to a touch direction determined by the direction determiner.

23 A mobile digital device according to claim 20, wherein the function controller controls the selected function according to a number of the touched regions detected by the electrostatic capacity sensing pad simultaneously.